



# Internet of Things (IoT)

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Real-Time, Resilient & Insight-Driven IoT Connectivity

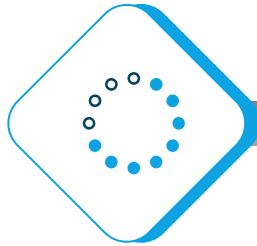
# What is Internet of Things (IoT)?



BSNL's IoT is **network of connected “things”** - devices embedded with sensors, SIMs, and communication tech



IoT devices **collect real-time information and send it through networks** (often via IoT SIM cards or wireless gateways) to cloud platforms or applications



By connecting devices & gathering live data, BSNL's IoT **enables automation and smarter decision-making**



Businesses get **real-time visibility into operations & environments**, allowing them to respond instantly, optimize processes, and create new insights

# IoT for Business

## Why does your business need Internet of Things (IoT)? (1/2)

1



### Real-Time Visibility & Insights

- IoT gives real-time insights into operations, assets, and supply chains
- This visibility helps detect issues early, track goods, and make fast, informed decisions

2



### Automation & Efficiency

- IoT automates manual tasks by enabling machines to communicate and act independently
- IoT reduces errors and delays—boosting productivity, service speed, and efficiency



## Why does your business need Internet of Things (IoT)? (2/2)

### IoT for Business

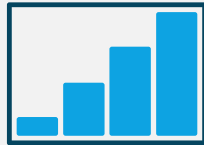
3



#### Cost Reduction & Optimization

- IoT cuts costs and optimizes resource use
- Sensors predict maintenance, cut energy waste, and reduce overstock










4



#### Improved Customer Experience

- IoT helps deliver faster, more responsive customer service
- IoT insights help businesses innovate and deliver smoother, more engaging experiences

# Today several promising IoT use cases have already been established cross industries

	 Manufacturing	 Transport. & logistics	 Utilities	 B2C	 Healthcare	 Energy & natural resources	 Retail	 Government	 Insurance
Use case	Self-optimizing production	Track & trace	Smart meter	Smart home - energy	Remote health monitoring	Automated mining drilling	Automated inventory management	Public transit	Usage based insurance
	Automated inventory management	Asset/fleet management	Demand response	Smart home - appliances	Treatment development	Precision agriculture	Real-time promotion & pricing	Traffic rerouting	Smart health insurance
	Predictive maintenance	Predictive maintenance	Distributed generation and storage	Smart home - Security	Predictive maintenance	Predictive maintenance	Layout optimization	Infrastructure asset management	
	Factory simulation	Connected car	Grid fault management	Wearables - quantify self		Agricultural animal tagging	Smart vending machines	Smart parking	
	Self-driving logistics vehicles			Wearables - augmented reality			Smart energy management	Smart energy management	
	Augmented work							Public safety	

# The BSNL Advantage: Scale, Trust and Service

Over  
**₹5,000 Cr**  
in enterprise  
revenue

Over  
**61,000**  
Enterprise  
branches under  
the Platinum  
category alone

- 1 Known for Trust and transparent (1:1) billing
- 2 Reliable connectivity partner offering resilient network



## Clients



## Why BSNL IoT?



BSNL uses **premium 700 MHz spectrum** for strong signal and wide coverage in both urban and rural areas



BSNL supports NB-IoT, including the **world's first satellite-based NB-IoT network**, to connect remote devices



BSNL IoT SIMs support private APNs and use IPsec VPN tunnels for **secure data transfer**



BSNL offers dedicated support and monitoring for enterprise IoT connectivity **ensuring high availability for critical IoT applications**



## BSNL offers IoT services across different industries (1/2)

1



Smart Cities

BSNL partners on end-to-end Smart City projects,

- AI-powered Video Surveillance
- Integrated Command & Control Centers
- Public Address Systems, e-Governance & ERP solutions

2



Utilities

Through its strategic MOU with ECIL, BSNL provides,

- Smart Metering solutions (AMR/AMI)
- e-SCADA & remote grid monitoring
- Integrated Surveillance Systems & Cyber-Security

3



Manufacturing

BSNL's IoT network powers factory digitization with,

- Automated workflows & process control
- Predictive maintenance via real-time sensor data
- Asset tracking and inventory monitoring



## BSNL offers IoT services across different industries (1/2)

4



Security

BSNL IoT supports advanced security use cases,

- AI-based CCTV analytics
- Automated Number-Plate & Speed Violation Detection
- Emergency Call Boxes & perimeter monitoring

5



Agriculture

With its satellite-backed network, BSNL connects,

- Soil-moisture & weather sensors for precision farming
- Livestock tracking & health monitoring
- Automated irrigation controls in remote fields

6



Logistics

BSNL IoT fleet solutions deliver,

- Real-time vehicle tracking
- Condition monitoring in transit
- Predictive route optimization using live telemetry